



Attorney Docket No.: 325772019400
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Toshiyuki YAMASHITA et al.

Application No.: 09/662,176

Confirmation No.: 2043

Filed: September 15, 2000

Art Unit: 3627

For: PARTS-MANAGEMENT SYSTEM, METHOD
OF MANAGING PARTS AND PARTS-
MANAGEMENT APPARATUS

Examiner: M.A. Cuff

RESPONSE TO NOTIFICATION
OF NON-COMPLIANT APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is in response to the Notification of Non-Compliant Appeal Brief dated May 11, 2006.
Filed herewith is a petition for a one-month extension of time. Accordingly, this response is timely
filed.

REMARKS

Attached, please find a substitute appeal brief which addresses each of the Examiner's bases for finding the brief submitted on February 17, 2006 and amended by the correction to the brief filed on March 20, 2006 non-compliant. The present brief is in compliance with the applicable rules and is ready for review by the Board.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing **Attorney Docket No. 325772019400**. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: July 11, 2006

Respectfully submitted,

By 

Wayne C. Jaeschke, Jr.

Registration No.: 38,503

MORRISON & FOERSTER LLP

1650 Tysons Blvd, Suite 300

McLean, Virginia 22102

(703) 760-7756



Attorney Docket No.: 325772019400
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Toshiyuki YAMASHITA et al.

Application No.: 09/662,176

Confirmation No.: 2043

Filed: September 15, 2000

Art Unit: 3627

For: PARTS-MANAGEMENT SYSTEM, METHOD
OF MANAGING PARTS AND PARTS-
MANAGEMENT APPARATUS

Examiner: M.A. Cuff

APPELLANT'S OPENING BRIEF (SUBSTITUTE)

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is a timely appeal from the final rejection of claims 1-4 and 6-17 in this application.

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is Minolta, Co., Ltd.

II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

There are no related appeals or interferences within the meaning of 37 CFR 41.37(c)(1)(ii) known to appellant or his undersigned counsel.

III. STATUS OF CLAIMS

Claims 1-4 and 6-17 are pending in this application. Claim 5 was cancelled during the course of prosecution. Claims 1-4 and 6-17 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No. 6,401,116 (hereinafter "Okigami") in view of U.S. Patent No. 5,847,814 (hereinafter "Antziopoulos").

IV. STATUS OF AMENDMENTS

There are no pending amendments to the appealed claims.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The invention relates to a system and method for managing the usage of replacement parts in copier systems. The system and method permits the management of parts by tracking the history and total usage of each part, irrespective of whether it has been used in a plurality of apparatuses.

By permitting the parts-management system to track and monitor the accumulated data and correlate that against the anticipated lifespan of each part (as determined by a stored value for each different identification information), the present system can determine when each part has reached or exceeded its usable life, irrespective of whether the part has been used in multiple copier system.

With reference to claim 1, the invention may be summarized as a terminal apparatus, shown in Fig. 1 and described on page 10, lines 1-9, of the specification as copier machine 4, and a management apparatus (computer 90) for communicating with said terminal apparatus. The terminal apparatus (copier machine 4) includes a first memory. Fig. 2 illustrates the CPU 41 and memory 47 (referred to as "RAM", which stands for random-access memory) which stores identification information of each part used in the terminal apparatus and an operation value for each part.

The controller for the terminal apparatus, described on page 4, lines 13, performs predetermined processing operations that correspond to operations of each part and updates the operation value stored in first memory (RAM) when the part operates. The controller of the terminal apparatus updates based on the identification information and the operation value of each part transmitted from the management apparatus. The corresponding operation value of said identification information stored in said first memory.

A first transmitter transmits the identification information of each part and said operation value corresponding to said identification information to said management apparatus. The transmitter is described on page 10, lines 10-19, referring to the data terminal 1 of Fig. 1. A second transmitter transmits a request signal for requesting a transmission of the operation value for at least one part. The second transmitter's function is described on page 38, lines 6-9, and shown generally in Fig. 16.

Further, the management apparatus includes a second memory which stores the identification information of each part and the operation value each sent by the first transmitter in a mutually related manner. The identification information is described on page 13, lines 1-22.

With respect to claim 8, the method includes performing a predetermined operation processing corresponding to an operation of each part to update the operation value stored in the first memory of the terminal apparatus when the part operates. This process is described beginning on page 24, line 7 and going through page 25, line 4. The process is also shown graphically in Fig. 8 (see S8-14 to S8-22) and includes transmitting the identification information of each part and the operation value corresponding to the identification information from the terminal apparatus to the management apparatus (S8-21).

The method also includes, storing in a second memory provided on the management apparatus the identification information of each part and the operation value transmitted from the terminal apparatus in a mutually related manner and then transmitting a request signal for requesting a transmission of the operation value for at least one part from the terminal apparatus to the management apparatus. See Fig. 8, S8-14 to S8-21, Fig 11, S721-7.

This embodiment also includes transmitting the identification information and the operation value for the requested part stored in the second memory of the management apparatus from the management apparatus to the terminal apparatus in response to the request signal; and updating the operation value for the requested part stored in the first memory of the terminal apparatus based on the identification information and the operation value for the requested part transmitted from the management apparatus. These features are illustrated in Fig.16 (S14-14 to S14-22), Fig. 17a, Fig. 25, and Fig. 26 and page 27, line 3 to page 38, line 19 of the specification.

Claim 15 refers to a memory for storing identification information of each part used in the terminal apparatus and an accumulated data corresponding to an operation of each part. Fig. 2 illustrates the CPU 41 and memory 47 (referred to as “RAM”, which stands for random-access memory) which stores identification information of each part used in the terminal apparatus and an accumulated data each part. The accumulated data includes data indicating the actual usage of each part over its life, including the actual usage of each part that has been used in a plurality of apparatus.

The embodiment also includes updating means for updating the accumulated data based on data sent from the terminal apparatus. This features generally refers to CPU 41 and memory 47. There is also included a transmitter which transmits at least one part identification information and its accumulated data each stored in the memory in response to a request signal from said terminal

apparatus. These features are describe in the specification on page 10, lines 10-19 and page 38, lines 6-9, and shown generally in Fig. 16.

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The rejection of claims 1-4 and 6-17 under 35 USC 103(a) as being unpatentable over Okigami in view of Antziopoulos. This is the only grounds of rejection.

VII. ARGUMENT

A. The rejection of claims 1-4 and 6-17 under 35 USC 103(a) as being unpatentable over Okigami in view of Antziopoulos be reversed.

The pending claims recite features that are not taught, disclosed, or suggested by Okigami or Antziopoulos. Thus, the Examiner has failed to establish *prima facie* obviousness and the rejection of claims 1-4 and 6-17 under 35 USC 103(a) should be reversed. The references, taken individually or in combination, fail to disclose a system in which information is transmitted from the terminal apparatus to the management apparatus to identify each replacement part and the total usage of each part.

The management apparatus, as recited in each independent claim, receives information to determine how long the identified part has been in operation over the part's entire lifetime (the part's operational value). The management apparatus is able to accurately determine how much life remains in the replacement part, even if that part has been previously installed in another copier. In other words, the present system and method differ from the cited prior art by monitoring and storing the actual, total usage of a copier part independent from that part's usage within an individual copier. The prior art of record merely tracks the usage of an individual part within a specific copier, but fails to teach a system in which the actual, total usage of a part is tracked over the lifetime of a part. The prior art, therefore, fails to teach a system in which a copier part can be removed from, for

example, a malfunctioning copier, and placed into service in another copier while still monitoring and tracking the usage of that part to determine when it has reached or exceeded its' usable lifespan – an objective that can be accomplished with the present system and method.

For example, claim 1 recites that “said controller of said terminal apparatus updates, based on said identification information and said operation value of each part transmitted from said management apparatus, the corresponding operation value of said identification information stored in said first memory”. An element used to accomplish this is “a first transmitter which transmits said identification information of each part and an operation value corresponding to said identification information to said management apparatus” – features absent from the prior art of record.

The Examiner's response to this argument (Office action of May 19, 2005) was that the “Examiner asserts that monitors must update a controller at some point. Otherwise, why install them.” The reasons for installing monitors, however, are numerous and there is no aspect of a “monitor” that inherently updates another component of a system – those skilled in the art may use monitors for visual observation of data and many other reasons. Thus the Examiner has failed to evaluate this element of the claims and its associated limitations. More importantly, the Examiner's unsupported assertion fails to address the relevant element of the claims. Specifically, that the “controller of said terminal apparatus updates, based on said identification information and said operation value of each part transmitted from said management apparatus, the corresponding operation value of said identification information stored in said first memory.” Nowhere does the reference teach that the controller is updated on the basis defined in the pending claims.

According to the claims at issue, therefore, information is transmitted to the management apparatus to identify each replacement part and the total usage of each part. The management apparatus may then use this information to determine how long the identified part has been in

operation over its lifetime. For example, if a part is removed from a malfunctioning copier system and used as a replacement part in a functioning system, the management apparatus would be able to accurately determine how much life remains in the replacement part, despite it having been previously installed in another copier. Specification, page 4, lines 13-20. This feature, as claimed, cannot be accomplished using the teachings of either prior art reference or references taken together as a whole.

The system taught by Antziopoulos does not teach a system for tracking the total usage of a replacement part. Antziopoulos merely teaches a system that includes a copy counter for a part installed in a single copier system. Specifically, Antziopoulos fails to teach a system where a management apparatus receives information specifically identifying a part and that part's actual usage.

Antziopoulos' system teaches that replacement components are installed by a user or technician. The parts have a usable life that cannot be determined by the central memory of the copier system, since the central memory of the copier system doesn't know the usable life of a component, and since certain manufacturers may make replacement components with varying usable lifespans. In order to determine when a part has reached or exceeded its lifespan, Antziopoulos suggests the use of a magnetic data card that is inserted into the machine to active it once a component is installed. The data card would include information about the usable life of the component, but the references do not suggest that the card would maintain information relating to the prior usage of the part. The specific copier system in which the part is installed would associate the part with a level of use indicator (i.e., copy counter). Col 3, lines 33-37. Nowhere, therefore, does Antziopoulos teach a system for tracking the total usage of a component.

Illustrative of the shortcoming of Antziopoulos is the disclosure that "[f]ollowing replacement of the replacement component, customer service will insert the magnetic card 50

adjoined by the manufacturer to each authorized component into the read/write unit to reset to null the pertinent display units.” Col. 4, lines 42-45. These display units include copy counters.

According to the system of Antziopoulos, therefore, the actual usage of a replacement part within a single copier may be tracked and compared with the manufacturer’s suggested usable life of the part, but there is no way to continue monitoring the usage of a part if it is moved from one copier to another in the middle of its lifespan. In other words, Antziopoulos cannot disclose that “said controller of said terminal apparatus updates, based on said identification information and said operation value of each part transmitted from said management apparatus, the corresponding operation value of said identification information stored in said first memory” since Antziopoulos only counts the copies made while a part is being used in a single copier. Moreover, at no time does Antziopoulos teach, disclose, or suggest any feature his device that ever transmits an “operation value” or update the operation value. This feature of the pending claims, therefore, cannot be found in the prior art of record.

B. The rejection of claim 15 under 35 USC 103(a) as being unpatentable over Okigami in view of Antziopoulos be reversed.

Claim 15 is directed toward “a memory for storing identification information of each part used in said terminal apparatus and an accumulated data corresponding to an operation of each part in a mutually related manner wherein said accumulated data includes data indicating the actual usage of each part over its life, including the actual usage of each part that has been used a plurality of apparatus”. As previously remarked, the cited references do not describe a system that can track a parts’ accumulated data or usage in a plurality of apparatuses. Further, neither cited reference teaches that the accumulated data of each part is updated based on data sent from the terminal apparatus. The references when combined, therefore, cannot show this feature. The rejection of claim 15 and claims depending therefrom should be withdrawn.

CONCLUSION

For the foregoing reasons, appellant respectfully requests the Board reverse the final rejections of claims 1-4 and 6-17.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing Attorney Docket No. 325772019400. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: July 11, 2006

Respectfully submitted,

By 

Wayne C. Jaeschke, Jr.

Registration No.: 38,503

MORRISON & FOERSTER LLP

1650 Tysons Blvd, Suite 300

McLean, Virginia 22102

(703) 760-7756

APPENDIX OF CLAIMS

1. A parts-management system comprising:

a terminal apparatus; and

a management apparatus for communicating with said terminal apparatus,

wherein said terminal apparatus includes:

a first memory which stores identification information of each part used in said terminal apparatus and an operation value corresponding to an operation of each part in a mutually related manner, and

a controller of said terminal apparatus which performs a predetermined operation processing corresponding to an operation of each part and updates said operation value stored in said first memory when said part operates, wherein said controller of said terminal apparatus updates, based on said identification information and said operation value of each part transmitted from said management apparatus, the corresponding operation value of said identification information stored in said first memory;

a first transmitter which transmits said identification information of each part and said

operation value corresponding to said identification information to said management apparatus; and

a second transmitter which transmits a request signal for requesting a transmission of said operation value for at least one part, and

wherein said management apparatus includes:

a second memory which stores said identification information of each part and said operation value each sent by said first transmitter in a mutually related manner; and a third transmitter which transmits said identification information and said operation value each stored in said second memory to said terminal apparatus in response to said request signal.

2. The parts-management system as recited in claim 1, wherein said second memory stores a life value showing a life of each part.

3. The parts-management system as recited in claim 2, wherein said management apparatus further includes a fourth transmitter which transmits said life value to said terminal apparatus.

4. The parts-management system as recited in claim 3, wherein said terminal apparatus further includes a fifth transmitter which compares said operation value with said life value and transmits identification information of a part whose operation value exceeds said life value.

5. (Canceled)

6. The parts-management system as recited in claim 1, wherein said second transmitter transmits a request signal for an equipped part when said part is equipped to said terminal apparatus.

7. The parts-management system as recited in claim 1, wherein said terminal apparatus is an image forming apparatus for forming an image on a sheet.

8. A method of managing parts for managing parts used in a terminal apparatus while conducting a data communication between said terminal apparatus and a management apparatus, wherein said terminal apparatus includes a first memory which stores identification information of each part used in said terminal apparatus and an operation value corresponding to an operation of each part in a mutually related manner, the method including the steps of:

performing a predetermined operation processing corresponding to an operation of each part to update said operation value stored in said first memory of said terminal apparatus when said part operates;

transmitting said identification information of each part and said operation value corresponding to said identification information from said terminal apparatus to said management apparatus;

storing in a second memory provided on said management apparatus said identification information of each part and said operation value transmitted from said terminal apparatus in a mutually related manner;

transmitting a request signal for requesting a transmission of said operation value for at least one part from said terminal apparatus to said management apparatus;

transmitting said identification information and said operation value for said requested part stored in said second memory of said management apparatus from said management apparatus to said terminal apparatus in response to said request signal; and

updating said operation value for said requested part stored in said first memory of said terminal apparatus based on said identification information and said operation value for said requested part transmitted from said management apparatus.

9. The method of managing parts as recited in claim 8, wherein said second memory of said management apparatus stores a life value showing a life of each part.

10. The method of managing parts as recited in claim 9, further including the step of:

transmitting said life value from said management apparatus to said terminal apparatus.

11. The method of managing parts as recited in claim 10, further including the step of:

comparing said operation value with said life value and transmitting said identification information of a part whose operation value exceeds said life value from said terminal apparatus to said management apparatus.

12. The method of managing parts as recited in claim 9, further including the step of :

inputting a signal concerning a cleaning of parts into said management apparatus and updating said stored life value in response to said signal.

13. The method of managing parts as recited in claim 8, wherein, in said step of transmitting said request signal, a request signal for a part equipped to said terminal apparatus is transmitted when said part is equipped to said terminal apparatus.

14. The method of managing parts as recited in claim 8, wherein said terminal apparatus is an image forming apparatus for forming an image on a sheet.

15. A parts-management apparatus which is capable of communicating with a terminal apparatus and manages parts used in said terminal apparatus, the parts-management apparatus comprising:

a memory for storing identification information of each part used in said terminal apparatus and an accumulated data corresponding to an operation of each part in a mutually related manner wherein said accumulated data includes data indicating the actual usage of each part over its life, including the actual usage of each part that has been used in a plurality of apparatus;

updating means for updating said accumulated data based on data sent from said terminal apparatus; and

a transmitter which transmits at least one part identification information and its accumulated data each stored in said memory in response to a request signal from said terminal apparatus.

16. The parts-management apparatus as recited in claim 15, wherein said memory stores a life value showing a life of each part, and wherein said transmitter further transmits said life value to said terminal apparatus.

17. The parts-management apparatus as recited in claim 16, further comprising a receiver for receiving a signal showing that a part is cleaned and updating said life value of a corresponding part in response to said received signal.

EVIDENCE APPENDIX

[NONE.]

RELATED PROCEEDINGS APPENDIX

[NONE.]